Paper No. 13

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HATIM YOUSEF AMRO and JOHN PAUL DODSON

Appeal No. 2001-0465
Application No. 09/070,039

ON BRIEF

Before FLEMING, RUGGIERO, and DIXON, ***Administrative Patent Judges***.

FLEMING, ***Administrative Patent Judge***.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-14, all the claims pending in the instant application.

The invention relates to the caching of received document pages or web pages received at a receiving display station on the network. See page 1 of Appellants' specification. With all of these rapidly expanding functions of web pages and like documentation, it should be readily understood that the demand for web documents has been expanding exponentially in recent

years. To this end, the Internet browser programs through which these users access the Internet are provided with caching capabilities at the receiving display station. See page 2 of Appellants' specification. Conventionally, many browser programs ask the user during set up to specify the quantity of RAM and the quantity of disk drive storage that he wishes to set aside for cache. Since a major portion of Internet and other network access terminal users are relatively unsophisticated in computer arts, this presents difficulties to such users. See pages 4 and 5 of Appellants' specification.

Appellants' invention offers a solution to this problem by tracking the prior activity of the user in network accessing, and uses this activity to automatically set aside appropriate RAM and disk drive storage for caching. See page 5 of Appellants' specification. Figure 3 is a flowchart of a program which may be used to track the sizing of caches during prior browsing sessions in order to size caches during subsequent sessions. See page 7 of Appellants' specification.

In Figure 3, step 82 is the determination step to determine whether a next page has been received, which at this point will be the initial page. If yes, then the cache sizes used in the browser presenting this page will be tracked. The process then

goes to step 85 where the size of the disk drive cache used in dealing with this page is sampled and then stored in a table of disk drive cache values, step 86. Correspondingly, step 87, the size of the RAM cache is sampled and then stored in a table of RAM cache values, step 88. See page 13 of Appellants' specification. The process then loops back in which more values are stored in the table. The RAM cache values stored in the above-mentioned tables for each page are averaged to a calculated value of RAM cache used and, step 90, the disk drive cache values stored in the above-mentioned tables for each page are averaged to a calculated value of the disk drive used. See pages 13 and 14 of Appellants' specification.

Now with respect to Figure 4, the flow chart shows how the sizes of the disk drive cache and RAM cache calculated in a prior session, as described in Figure 3, may be used to allocate such caches in the next browsing session. See page 14 of Appellants' specification. If a manual cache size input has not been made in step 96, the process proceeds to step 93 to get the stored average size value of RAM cache and disk drive cache as stored in step 9 in Figure 3. See page 14 of Appellants' specification.

Independent claim 1 present in the application is reproduced as follows:

1. In a computer managed communications network with user access via a plurality of data processor controlled interactive receiving display stations and with a system for displaying documents transmitted to said display stations from locations remote from said stations, said documents including a sequence of at least one display screen page including images, the improvement comprising:

at least one of said receiving display stations including disk storage means, random access memory means and a cache including portions of said disk storage means and said random access memory means for storing data representative or received screen pages; and

means for determining the size of said portions of disk storage means and said random access storage means for said cache comprising;

means for monitoring the quantities of disk storage and of random access memory used in said cache during prior transmission of screen pages to said at least one receiving display station, and

means for sizing the portions of disk storage and random access memory allocated to the present cache based upon said monitoring.

REFERENCES

The references relied on by the Examiner are as follows:

Vishlitzky et al. (Vishlitzky)	5,706,467	Jan. 6, 1998
Nielson	5,826,031	Oct. 20, 1998 (filed Jun. 10, 1996)

REJECTION AT ISSUE

Claims 1-14 stand rejected under 35 U.S.C. § 103 as being unpatentable over Nielson in view of Vishlitzky.

Rather than repeat the arguments of Appellants or Examiner, we make reference to the brief and the answer for the respective details thereof.

OPINION

With full consideration being given to the subject matter on appeal, the Examiner's rejection and the arguments of Appellants and Examiner, for reasons stated ***infra***, we reverse the Examiner's rejection of claims 1-14 under 35 U.S.C. § 103.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a ***prima facie*** case of obviousness. ***In re Oetiker***, 977 F.2d 1443, 1445, 24 USPQ 1443, 1444 (Fed. Cir. 1992). See also ***In re Piasecki***, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. ***In re Fine***, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Only if this initial burden is met does the burden of coming

forward with evidence or argument shift to the Appellants. ***Oetiker***, 977 F.2d at 1445, 24 USPQ at 1444. ***See also Piasecki***, 745 F.2d at 1472, 223 USPQ at 788.

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. "In reviewing the [E]xaminer's decision on appeal, the Board must necessarily weigh all of the evidence and arguments." ***In re Oetiker***, 977 F.2d at 1445, 24 USPQ2d at 1444. "[T]he Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." ***In re Lee***, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

When determining obviousness, "the [E]xaminer can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or individual to combine the relevant teachings of the references'". ***In re Lee***, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), ***citing In re Fritch***, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not

'evidence'". ***In re Dembiczak***, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617. "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact." ***Dembiczak***, 175 F.3d at 999, 50 USPQ2d at 1617, ***citing McElmurry v. Arkansas Power & Light Co.***, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

Appellants argue that Nielsen does not relate to any kind of cache functions and certainly does not teach or suggest sizing of cache or monitoring of prior transmissions for cache sizing. See page 4 of Appellants' specification. Appellants argue that Vishlitzky does not teach or suggest cache sizing based upon monitoring prior transmissions of screened pages.

Upon our review of Appellants' claims, we note that all the claims require monitoring the quantity of disk storage and of RAM used in cache during prior transmission of screened pages. Furthermore, as we pointed out above, this is consistent with Appellants' disclosure.

Upon our review of Nielsen and Vishlitzky, we fail to find any teaching or suggestion of determining cache size based upon prior transmission of screened pages. In particular, we note that Vishlitzky is concerned with cache sizing but does not base cache sizing on monitoring the quantity of disk storage and of

RAM used in the cache during prior transmission of screened pages. Vishlitzky, instead, teaches a system memory having a replacement queue which includes a microcache for selected sequential operations. If the replacement queue is stressed as determined by the average fall through time of the data elements in the replacement queue compared to a predetermined threshold, then the microcache is used for staging all accesses identified by the sequential operation. See Vishlitzky, column 3, lines 36 through 42. Therefore, Vishlitzky is using a completely different method for sizing of cache and does not teach or suggest the Appellants' invention.

In view of the foregoing, we have not sustained the Examiner's rejection of claims 1-14 under 35 U.S.C. § 103.

REVERSED

MICHAEL R. FLEMING Administrative Patent Judge	)	
JOSEPH F. RUGGIERO Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JOSEPH L. DIXON Administrative Patent Judge	)	

MRF/lbg

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